



# Town of Narragansett Chapter 1666 Police Pension Plan

July 1, 2017  
Actuarial Valuation Report

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# Town of Narragansett Chapter 1666 Police Pension Plan

Actuarial Valuation as of July 1, 2017

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	Page
<b>Actuarial Certification</b> .....	1
<b>Executive Summary</b> .....	3
Summary Results	
Changes Since Prior Valuation and Key Notes	
<b>Assets and Liabilities</b> .....	5
Present Value of Future Benefits	
Funding Liability	
Asset Information	
Reconciliation of Gain/Loss	
<b>Contribution Requirements</b> .....	9
Development of Actuarially Determined Contribution	
<b>Demographic Information</b> .....	10
<b>Participant Reconciliation</b> .....	12
<b>Plan Provisions</b> .....	13
<b>Actuarial Assumptions</b> .....	14
<b>Other Measurements</b> .....	16
Schedule of Amortizations	

At the request of the plan sponsor, this report summarizes the Town of Narragansett Chapter 1666 Police Pension Plan as of July 1, 2017. The purpose of this report is to communicate the following results of the valuation:

- Funded Status; and
- Actuarially Determined Contribution as of July 1, 2017 for plan year ending June 30, 2019

This report has been prepared in accordance with the applicable Federal and State laws. Consequently, it may not be appropriate for other purposes. Please contact Nyhart prior to disclosing this report to any other party or relying on its content for any purpose other than that explained above. Failure to do so may result in misrepresentation or misinterpretation of this report.

The results in this report were prepared using information provided to us by other parties. The census information has been provided to us by the Town. Asset information has been provided to us by the Board. We have reviewed the provided data for reasonableness when compared to prior information provided, but have not audited the data. Where relevant data may be missing, we have made assumptions we believe to be reasonable. We are not aware of any significant issues with and have relied on the data provided. Any errors in the data provided may result in a different result than those provided in this report. A summary of the data used in the valuation is included in this report.

The actuarial assumptions and methods were chosen by the Town. In our opinion, all actuarial assumptions and methods are individually reasonable and in combination represent our best estimate of anticipated experience of the plan. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- plan experience differing from that anticipated by the economic or demographic assumptions;
- changes in economic or demographic assumptions;
- increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and
- changes in plan provisions or applicable law.

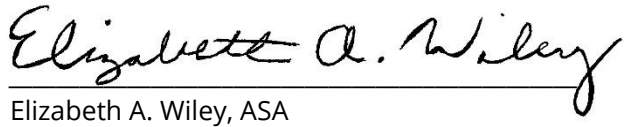
We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement. This report has been prepared in accordance with generally accepted actuarial principles and practice.

Neither Nyhart nor any of its employees have any relationship with the plan or its sponsor which could impair or appear to impair the objectivity of this report.

To the extent that this report or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States and are available for any questions.

Nyhart

  
Elizabeth A. Wiley, ASA

  
Carter M. Angell, FSA, EA, MAAA

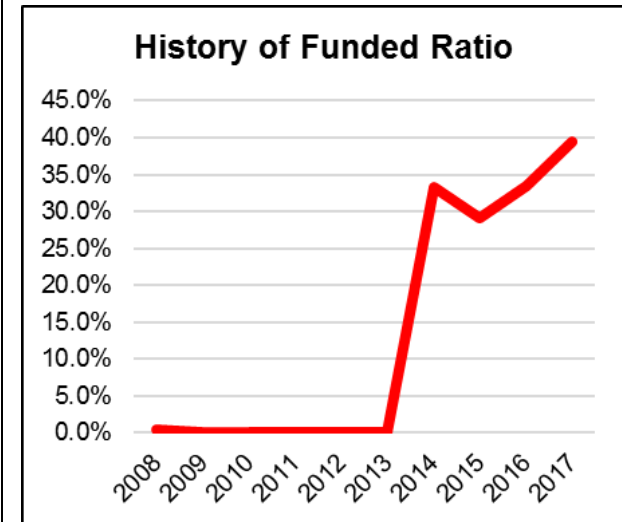
December 19, 2017

Date

**Summary Results**

The actuarial valuation's primary purpose is to produce a scorecard measure displaying the funding progress of the plan toward the ultimate goal of paying benefits at retirement. The accrued liability is based on an entry age normal method.

<b>Valuation Date For Plan Year Ending</b>	<b>July 1, 2016 June 30, 2018</b>	<b>July 1, 2017 June 30, 2019</b>
<b>Funded Status Measures</b>		
Entry Age Accrued Liability	\$2,450,507	\$2,373,613
Actuarial Value of Assets	820,641	934,315
Unfunded Accrued Liability	\$1,629,866	\$1,439,298
Funded Percentage (AVA)	33.5%	39.4%
Funded percentage (MVA)	33.5%	39.4%
<b>Cost Measures</b>		
Actuarially Determined Contribution	\$226,427	\$215,294
Actuarially Determined Contribution (as a percentage of payroll)	N/A	N/A
<b>Asset Performance</b>		
Market Value of Assets (MVA)	\$820,641	\$934,315
Actuarial Value of Assets (AVA)	\$820,641	\$934,315
Actuarial Value/Market Value	100.0%	100.0%
<b>Participant Information</b>		
Active Participants	0	0
Terminated Vested Participants	0	0
Retirees, Beneficiaries, and Disabled Participants	17	16
Total	17	16



### **Changes since Prior Valuation and Key Notes**

There have been no changes to the plan provisions since the last valuation.

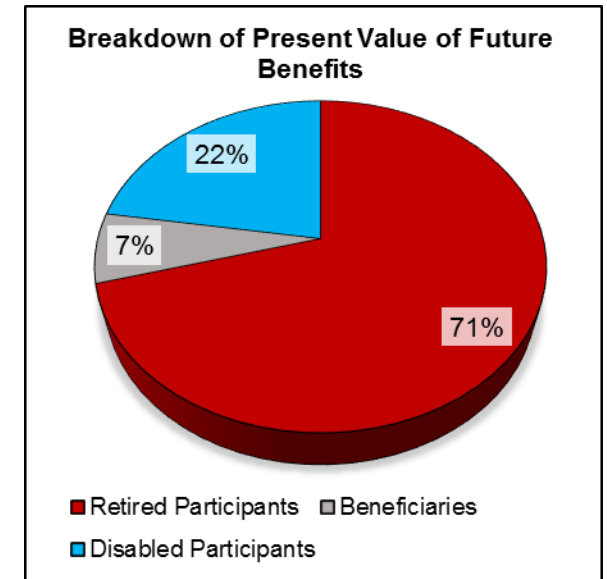
The mortality for healthy participants has been updated from the RP-2014 Blue Collar Mortality Table with generational improvements from 2006 based on assumptions from the 2015 SSA Trustee's Report to the RP-2014 Blue Collar Mortality Table with generational improvements from 2006 based on assumptions from the 2016 SSA Trustee's Report. This change caused a decrease in the funding liability and the actuarially determined contribution.

The mortality for disabled participants has been updated from the RP-2014 Disabled Mortality Table with generational improvements from 2006 based on assumptions from the 2015 SSA Trustee's Report to the RP-2014 Disabled Mortality Table with generational improvements from 2006 based on assumptions from the 2016 SSA Trustee's Report. This change caused a decrease in the funding liability and the actuarially determined contribution.

**Present Value of Future Benefits**

The Present Value of Future Benefits represents the future benefits payable to the existing participants.

	July 1, 2017
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<b>Present Value of Future Benefits</b>	
Active participants	
Retirement	\$0
Disability	0
Death	0
Termination	0
Refund of contributions	0
Total active	\$0
Inactive participants	
Retired participants	\$1,678,278
Beneficiaries	161,922
Disabled participants	533,413
Terminated vested participants	0
Total inactive	\$2,373,613
<b>Total</b>	<b>\$2,373,613</b>
 Present value of future payrolls	 N/A





**Funding Liability**

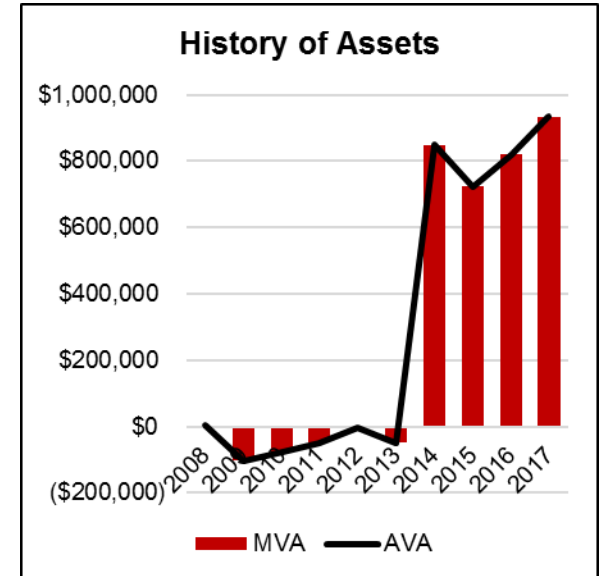
The Funding Liability measures the present value of benefits earned as of the valuation date, using a specified set of actuarial assumptions.

	<b>July 1, 2017</b>
<b>Entry Age Normal Liabilities</b>	
Active participants	
Retirement	\$0
Disability	0
Death	0
Termination	0
Refund of contributions	0
Total Active	\$0
Inactive participants	
Retired participants	\$1,678,278
Beneficiaries	161,922
Disabled participants	533,413
Terminated vested participants	0
Total Inactive	\$2,373,613
Total	\$2,373,613
Normal Cost	\$0

**Asset Information**

The amount of assets backing the pension promise is the most significant driver of volatility and future costs within a pension plan. The investment performance of the assets directly offsets the ultimate cost.

	<b>July 1, 2017</b>
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<b>Market Value Reconciliation</b>	
Market value of assets, beginning of prior year	\$820,641
Employer Contributions	\$267,000
Investment income	97,685
Benefit payments	(251,011)
Market value of assets, beginning of current year	\$934,315
Return on Market Value	11.82%
Market value of assets available for pension benefits	\$934,315
<b>Actuarial value of assets</b>	
Value at beginning of current year	\$934,315



**Reconciliation of Gain/Loss**

**July 1, 2017**

**Liability (gain)/loss**

Actuarial liability, July 1, 2016	\$2,450,507
Normal cost	0
Benefit payments	(251,011)
Expected Interest	167,557
Change in actuarial assumptions	<u>(13,553)</u>
Expected actuarial liability, beginning of current year	\$2,353,500
Actual actuarial liability	\$2,373,613
Liability (gain)/loss	\$20,113

**Asset (gain)/loss**

Actuarial value of assets, July 1, 2016	\$820,641
Contributions	267,000
Benefit payments	(251,011)
Expected investment return	<u>59,652</u>
Expected actuarial value of assets, beginning of current year	\$896,282
Actual actuarial value of assets, beginning of current year	\$934,315
Asset (gain)/loss	(\$38,033)

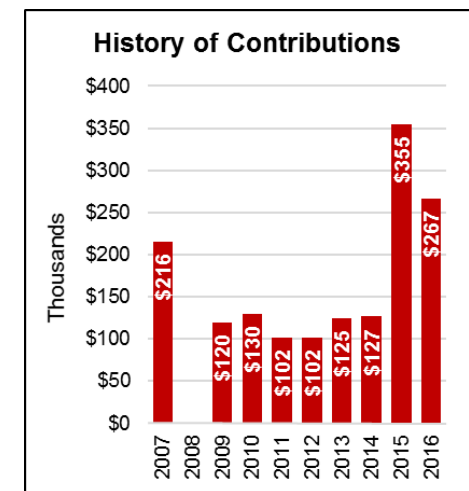
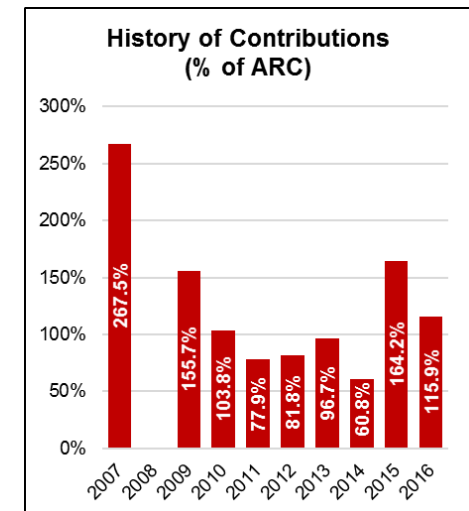
**Total (gain)/loss**

(\$17,920)

**Development of Actuarially Determined Contribution**

The actuarially determined contribution is the annual amount necessary to fund the plan according to funding policies and/or applicable laws.

<b>Valuation Date For Plan Year Ending</b>	<b>July 1, 2017 June 30, 2019</b>
<b>Funded Position</b>	
1. Entry age accrued liability	\$2,373,613
2. Actuarial value of assets	\$934,315
3. Unfunded actuarial accrued liability (UAAL)	\$1,439,298
<b>Employer Contributions</b>	
1. Normal Cost	\$0
2. Amortization of UAAL	193,972
3. Applicable interest	21,322
4. Actuarially determined contribution	\$215,294



**Demographic Information**

The foundation of a reliable actuarial report is the participant information provided by the plan sponsor. Monitoring trends in demographic information is crucial for long-term pension planning.

**July 1, 2017**

**Participant Counts**

Active Participants	0
Retired Participants	8
Beneficiaries	6
Disabled Participants	2
Terminated Vested Participants	0
Total Participants	16

**Active Participant Demographics**

Average Age	N/A
Average Service	N/A
Average Compensation	N/A
Covered Payroll	N/A
Total Payroll	N/A

July 1, 2017

**Retiree Statistics**

Average Age	74.9
Average Monthly Benefit	\$1,894

**Beneficiary Statistics**

Average Age	83.8
Average Monthly Benefit	\$381

**Disabled Participants Statistics**

Average Age	66.8
Average Monthly Benefit	\$1,764

**Terminated Participants Statistics**

Average Age	N/A
Average Monthly Benefit	N/A

**Participant Reconciliation**

	Active	Terminated Vested	Disabled	Retired	Beneficiaries	Totals
<b>Prior Year</b>	0	0	2	8	7	17
<b>Disabled</b>						
To Death	0	0	0	0	0	0
<b>Retired</b>						
To Death	0	0	0	0	0	0
<b>Survivor</b>						
To Death	0	0	0	0	(1)	(1)
<b>Additions</b>	0	0	0	0	0	0
<b>Departures</b>	0	0	0	0	0	0
<b>Current Year</b>	0	0	2	8	6	16

<b>Name of Plan</b>	Town of Narragansett Chapter 1666 Police Pension Plan
<b>Participation</b>	All members of the permanent Police Force who were hired prior to July 1, 1978 and refused the September 1984 offer to join the Chapter 1666 Pension Plan
<b>Benefits</b>	
<b>Normal Retirement</b>	
Eligibility	The attainment of age 65 or the completion of 20 years of service
Benefit	50% of Final Earnings
<b>Disability Retirement</b>	
Eligibility	A member becomes unable to perform Active Police Duty by reason of clearly proved physical or mental infirmities
Benefit	50% of Final Earnings in the Year of Disability
<b>Preretirement Death</b>	
Eligibility	An active member dies after 25 Years of Service
Benefit	His widow shall receive 67.5% of the member's Accrued Benefit continuing until her death or remarriage
<b>Optional Forms of Payment</b>	Married participants are entitled to a 67.5% Joint and Survivor Annuity. If not married, participants are entitled to a Life Annuity



Except where otherwise indicated, the following assumptions were selected by the plan sponsor with the concurrence of the actuary. Prescribed assumptions are based on the requirements of the relevant law, the Internal Revenue Code, and applicable regulation. The actuary was not able to evaluate the prescribed assumptions for reasonableness for the purpose of the measurement.

<b>Valuation Date</b>	July 1, 2017
<b>Participant and Asset Information Collected as of</b>	July 1, 2017
<b>Cost Method (CO)</b>	Entry Age Normal Cost Method
<b>Amortization Method (CO)</b>	Unfunded Actuarial Accrued Liability is amortized over the average expected future lifetime of the plan participants
<b>Asset Valuation Method</b>	The actuarial value of assets is equal to the market value of assets
<b>Interest Rates (CO)</b>	7.2%
	This assumption has been set by the plan sponsor in conjunction with their asset advisor. Detailed evaluation of this assumption was outside the scope of our engagement.
<b>Expense and/or Contingency Loading (FE)</b>	None
<b>Mortality Rates (FE)</b>	
Healthy	RP-2014 Blue Collar Mortality Table with generational improvements from 2006 based on assumptions from the 2016 SSA Trustee's Report
Disabled	RP-2014 Disabled Mortality Table with generational improvements from 2006 based on assumptions from the 2016 SSA Trustee's Report
	As the plan is not large enough to have credible experience, mortality assumptions are set to reflect general population trends.

**Cost of Living Adjustment**

3% for eligible employees

FE indicates an assumption representing an estimate of future experience

MD indicates an assumption representing observations of estimates inherent in market data

CO indicates an assumption representing a combination of an estimate of future experience and observations of market data

The actuarial report also shows the necessary items required for plan reporting and any state requirements.

- ✓ Schedule of Amortizations

**Schedule of Amortizations**

**July 1, 2017**

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<u>Date Established</u>	<u>Original Amount</u>	<u>Remaining Years</u>	<u>Balance</u>	<u>Payment</u>
7/1/2014	\$1,694,385	10	\$1,447,047	\$193,970
7/1/2015	\$131,154	10	\$116,140	\$15,568
7/1/2016	(\$37,869)	11	(\$35,776)	(\$4,495)
7/1/2017	(\$88,113)	11	<u>(\$88,113)</u>	<u>(\$11,071)</u>
Total			\$1,439,298	\$193,972